Notice of Allowability	Application No.	Applicant(s)	
	10/748,767	SANJAY, ADDICAM V.	
	Examiner	Art Unit	
	CAROLINE ARCOS	2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *12/05/2008*.

2. ☒ The allowed claim(s) is/are *1, 5-9, 13-17, 21-24 and 28-30 are now renumbered as claims 1-18*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

/Meng-Ai An/
Supervisory Patent Examiner, Art Unit 2195

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Mr. Mark Van Ness on 02/27/2009.

3. The following claims have been amended:

1. A computerized method comprising:

receiving packets of data in a first queue, each of the packets having one of a plurality of priorities, the plurality of priorities including a first priority and a second priority, the first priority being higher than the second priority;

copying a first plurality of packets from the first queue to a second queue, the first queue and the second queue each containing a plurality of sub-queues, each of the plurality of sub-queues representing one of the plurality of priority levels, wherein each packet is placed in a sub-queue of the plurality of sub-queues that is associated with the priority level of the packet;

scheduling a first set of packets from the second queue, wherein the first set of packets includes one or more of packets of the first priority if the second queue contains packets of the first priority and one or more packets of the second priority if the second queue contains packets

of the second priority, and wherein the number of packets in the set of packets for each priority are chosen using weighted round robin scheduling based on the priority of each packet;

providing the first set of packets from the second queue to a device driver;

determining whether after the first set of packets has been provided to the device driver, the second queue includes a packet with the first priority;

if the second queue includes a packet with a first priority after the first set of packets has been provided to the device driver, scheduling a second set of packets from the second queue using the weighted round robin scheduling, wherein the number of the packets scheduled is weighted based upon the priority of each packet; and

if the second queue does not include a packet with the first priority after the first set of packets has been provided to the device driver, pausing scheduling of packets from the second queue, and copying a second plurality of packets from the first queue to the second queue.

2-4. (Cancelled).

5. The method of claim 1, further comprising determining whether the second queue contains one or more packets of the first priority after copying the second plurality of packets from the first queue into the second queue.

6. The method of claim 5, further comprising commencing a delay period if there is a determination that the second queue does not contain one or more packets of the first priority after copying the second plurality of packets into the second queue.

7. The method of claim 6, wherein during the delay period the scheduling of packets from the second queue is to continue after the determination that there are no packets of the first priority in the second queue.

8. The method of claim 6, wherein said commencing the delay period comprises starting a timer.

9. An apparatus comprising:

a processor to process data, the data including data packets for scheduling;

a memory, to include:

a first queue, the first queue to receive packets of data, each packet of data having one of a plurality of different priority levels, the plurality of different priority levels including a first priority and a second priority, the first priority being higher than the second priority, and

a second queue, the second queue to contain a first plurality of packets copied from the first queue , the first queue and the second queue each containing a plurality of sub-queues, each of the plurality of sub-queues representing one of the plurality of priority levels, wherein each packet is placed in a sub-queue of the plurality of sub-queues that is associated with the priority level of the packet; and

a scheduler, to schedule packets from the second queue; to copy packets from the first queue to the second queue and to schedule a first set of packets from the second queue, wherein the first set of packets includes one or more of packets of the first priority if the second queue

contains packets of the first priority and one or more packets of the second priority if the second queue contains packets of the second priority, and wherein the number of packets in the set of packets for each priority are chosen using weighted round robin scheduling based on the priority of each packet;

the scheduler to provide the first set of packets to a device driver and to determine whether the second queue contains packets of the first priority after providing the first set of packets to the device driver, and, if the second queue includes one or more packets with the first priority after the first set of packets have been provided to the device driver, the scheduler to schedule a second set of packets from the second queue using the weighted round robin scheduling, wherein the number of the packets scheduled is weighted based upon the priority of each packet; and, if the second queue does not include a packet with the first priority after the first set of packets has been provided to the device driver, pausing scheduling of packets from the second queue, and the scheduler ~~to~~ copies a second plurality of packets from the first queue to the second queue.

10-12. (Cancelled)

13. The scheduler of claim 9, wherein the scheduler is further to determine whether the second queue contains one or more packets of the first priority after copying the second plurality of packets into the second queue.

14. The scheduler of claim 9, further comprising a timer for a delay period, the scheduler to start

the timer if the scheduler determines that the second queue does not contain the one or more packets of the first priority after copying the second plurality of packets into the second queue.

15. The scheduler of claim 14, wherein the scheduler is to continue scheduling packets while the timer is active.

16. A system comprising:

a memory;

a device driver to receive packets of data; and

a scheduler, the scheduler to receive data from the memory, the scheduler comprising:

a first queue, the first queue to receive packets of data, each packet of data having one of a plurality of different priority levels, the plurality of different priority levels including a first priority and a second priority, the first priority being higher than the second priority;

a second queue, the second queue to receive a first plurality of packets copied from the first queue, the first queue and the second queue each containing a plurality of sub-queues, each of the plurality of sub-queues representing one of the plurality of priority levels; wherein each packet is placed in a sub-queue of the plurality of sub-queues that is associated with the priority level of the packet; and

a scheduling module, the scheduling module to schedule a first set of packets from the second queue, wherein the first set of packets includes one or more of packets of the first priority if the second queue contains packets of the first priority and one or more packets of the second priority if the second queue contains packets of the second priority, and wherein the

number of packets in the set of packets for each priority are chosen using weighted round robin scheduling based on the priority of each packet; and to provide the scheduled first set of packets to the device driver;

the scheduler to determine whether the second queue contains packets of the first priority after the first set of packets have been provided to the device driver, and, if the second queue includes one or more packets with the first priority after the first set of packets have been provided to the device driver, the scheduler to schedule a second set of packets from the second queue using the weighted round robin scheduling, wherein the number of the packets scheduled is weighted based upon the priority of each packet; and, if the second queue does not include a packet with the first priority after the first set of packets has been provided to the device driver, pausing scheduling of packets from the second queue, and the scheduler copies a second plurality of packets from the first queue to the second queue.

17. The system of claim 16, further comprising a processor and a bus, the processor and memory being coupled with the bus.

18-20. (Cancelled)

21. The system of claim 16, wherein the scheduler is further to determine whether the second queue contains one or more packets of the first priority after copying the second plurality of packets into the second queue.

22. The system of claim 21, further comprising a timer, the scheduler to start the timer if the

second queue does not contain one or more packets of the first priority after copying the second plurality of packets into the second queue, the timer to run for a delay period.

23. The system of claim 22, wherein the scheduler is to continue scheduling packets from the second queue during the delay period.

24. A computer-readable storage medium having stored thereon data representing sequences of instructions that, when executed by a processor, cause the processor to perform operations comprising:

receiving packets of data in a first queue, each of the packets having one of a plurality of priorities, the plurality of priorities including a first priority and a second priority, the first priority being higher than the second priority;

copying a first plurality of packets from the first queue to a second queue, the first queue and the second queue each containing a plurality of sub-queues, each of the plurality of sub-queues representing one of the plurality of priority levels, wherein each packet is placed in a sub-queue of the plurality of sub-queues that is associated with the priority level of the packet;

scheduling a first set of packets from the second queue, wherein the first set of packets includes one or more of packets of the first priority if the second queue contains packets of the first priority and one or more packets of the second priority if the second queue contains packets of the second priority, and wherein the number of packets in the set of packets for each priority are chosen using weighted round robin scheduling based on the priority of each packet;

providing the first set of packets from the second queue to a device driver;

determining whether after the first set of packets have been provided to the device driver the second queue includes a packet with the first priority;

if the second queue includes a packet with a first priority after the first set of packets have been provided to the device driver, scheduling a second set of packets from the second queue using the weighted round robin scheduling; wherein the number of the packets scheduled is weighted based upon the priority of each packet; and

if the second queue does not include a packet with the first priority after the first set of packets have been provided to the device driver, pausing scheduling of packets from the second queue and copying a second plurality of packets from the first queue to the second queue.

25-27. (Cancelled)

28. The medium of claim 24, further comprising instructions for determining whether the second queue contains one or more packets of the first priority after copying the second plurality of packets from the first queue into the second queue.

29. The medium of claim 28, further comprising instructions for commencing a delay period if there is a determination that the second queue does not contain one or more packets of the first priority after copying the second plurality of packets into the second queue.

30. The medium of claim 29, wherein during the delay period the scheduling of packets from the

second queue is to continue after the determination that there are no packets of the first priority in the second queue.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CAROLINE ARCOS whose telephone number is (571)270-3151. The examiner can normally be reached on Monday-Thursday 7:00 AM to 5:30 PM.

5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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